

## Holttum's contribution to horticulture in the Malaysia-Singapore region

by

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Horticulture both in Malaysia† and Singapore has taken on a very significant role to-day. With rapid urbanisation the importance of planting trees and garden plants whether for beautification or for other aesthetic reasons, has become not only a very important undertaking, but a way of life with the peoples of the region. Many, both amateurs and professionals, who are involved with gardening and other horticultural pursuits in this region, make constant references to two famous publications — "Gardening in the lowlands of Malaya," and "Flora of Malaya, Vol I — Orchids." The author of these publications is none other than Professor R.E. Holttum. To the amateur who tends his house garden, to the professional gardener who runs a commercial orchid nursery or ornamental garden, to the horticulturists of horticultural establishments, Holttum is a household name. That this should be so is not surprising as Professor Holttum has done more for the promotion of horticulture in this region than anyone else.

Holttum first came out to Singapore in 1922, at a time when there were a few Chinese commercial gardens growing some orchids and a few flowering and foliage plants. Most of these gardens were in Orchard Road, Thomson Road and the Newton and Bukit Timah districts of Singapore, and a few in Penang. Interest in gardening among the people at this time was keen, but there was no proper guidance by an authority on the subject. Holttum befriended the Chinese gardeners, and spent considerable time discussing with them horticultural matters, and at the same time observing the traditional Chinese methods of growing plants, one of which was the use of burnt clay as a potting medium. There was here an interchange of knowledge between the botanist and the practical gardener. A few of these gardeners who are alive to-day and whose children now carry on the management of their nurseries, speak very highly of Holttum, both as a horticulturist and as a kind man. Holttum's knowledge of horticulture was not obtained from books alone. His was a practical approach to the subject as a result of long experience in the growing of tropical plants in the region. He did not as a rule, resort wholly to scientific methods, or put forward scientific suggestions. In the pursuit of gardening, he always made it easy for the ordinary man.

In 1928 Holttum together with John Laycock and Emile Galistan, two very keen orchid growers founded the Malayan Orchid Society. At this time there was a great interest shown by the public in the growing of orchids, and the three must have realised that such a Society would play an important role in the promotion of orchid growing in the country. A few years later the Singapore Gardening Society was formed, and Holttum was mainly responsible for its founding. Meetings were regularly held for members, and the two Societies under the expert guidance and advice of Holttum flourished, and played a great role in the promotion of orchid growing and gardening in the region. Annual shows were held, the first being an orchid show organised by the Malayan Orchid Society (now the Orchid Society of S.E. Asia) on the 27th and 28th of March 1931 at the

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\* lately Head, Botanic Gardens, Penang.

\*\* Botanic Gardens, Singapore.

† here denotes Malaya, Sarawak and Sabah.

YMCA Building in Stamford Road, Singapore. Holttum was mainly responsible for putting up the exhibits of the many species of orchids and the newly raised hybrids of the Singapore Botanic Gardens. It was Holttum who for the first time at this exhibition demonstrated to the Singaporeans and Malaysians alike, the Knudson method of asymbiotic flask culture of growing orchids, showing flasks of orchid seeds at the germination stage, others with seedlings at different stages of growth, and finally established seedlings planted on pieces of wood. This technique in orchid propagation, which Holttum started in 1928 was the turning point in the growing of orchids in the Malaysia-Singapore region, and in fact the whole of S. E. Asia. Seeds could now be successfully germinated and as such, was a tremendous asset in the hybridisation and breeding of orchids in the region. Holttum himself produced a large number of hybrids. The orchid shows continued annually until 1934, when the first flower show including both ornamental and orchid plants was held at the New World Stadium from the 6th–8th April, and jointly organised by members of both the Malayan Orchid Society and the Singapore Gardening Society. These shows were to continue annually to the present time. Holttum must have known that horticultural shows are of immense value to both professional and amateur growers, for they serve to raise the standard of horticulture in the country by giving the growers a chance to compare their exhibits and to show what can be achieved. They also help to encourage the non-gardener to take an interest in gardening. Holttum retired as Director of the Singapore Botanic Gardens in 1949 and was appointed Professor of Botany at the newly formed University of Malaya. He held this post until 1954 when he returned to England. For over 25 years he had devoted his time energetically to the activities of the Malayan Orchid Society and the Singapore Gardening Society.

Although the flora of the Malaysia-Singapore area is one of tropical rain forest, it is surprising to note that there are few indigenous plants of horticultural value. Native ornamental plants and flowering trees are few compared to the abundance of species in the flora of the area. The flowering trees and ornamental plants grown in one's garden, in parks and open spaces, by roads and streets and even in the Botanic Gardens, have mostly been introduced especially from Central and South America, and other parts of Tropical Asia. The introduction of new plants into Malaysia and Singapore has therefore played an important role in the horticultural beautification of the area. Although private individuals, business houses and other establishments have to some extent been responsible in the introduction of plants into this region, it was Holttum, during his 27 years of office as Assistant Director and Director of the Gardens Department, Straits Settlements (Singapore, Malacca and Penang), who was mainly responsible for the countless numbers of flowering trees and shrubs introduced to the two Botanic Gardens in Singapore and Penang from tropical regions of North and South America, Africa, Asia and Australia. Many of these plants to-day are extensively grown in parks, by roadsides, and private gardens and commercial nurseries throughout Malaysia and Singapore.

Holttum is a widely travelled person, having attended many international horticultural conferences. His lectures and papers presented at these conferences included topics on various aspects of horticulture in this region, particularly relating to orchids and ferns.

Some thirty odd plants, both species and hybrids, have been named after Holttum. Perhaps the trigenic orchid hybrid *Holttumara cochineal* (*Arachnis* x *Renanthera* x *Vanda*) is the most outstanding as far as horticultural plants are concerned. A painting of this hybrid was made by a staff member of the Royal Botanic Gardens, Kew, and presented to Holttum on his 80th birthday. Some years back the authors on a plant collecting trip to Kaki Bukit in Perlis, Peninsula



Malaysia, discovered a staghorn fern which was appropriately named *Platyserium holttumii*, for no one in this region has done more towards popularising the growing of ferns as a decorative house plant than Holttum.

In 1940 for the first time, three local officers were recruited by Holttum for horticultural training. K. C. Cheang was assigned to the Botanic Gardens in Penang, A. G. Alphonso to the Botanic Gardens in Singapore and N. V. Lange to the Parks Department in Singapore and subsequently to the Parks Department in Ipoh, Perak. Holttum must have realised at this time that the future of horticulture in the region rested with qualified local horticulturists. Up to such time horticulturists were expatriate officers recruited from the Royal Botanic Gardens, Kew. Apart from the training received directly under Holttum, the officers were sent to the College of Agriculture in Serdang, Malaysia, and later K. C. Cheang proceeded to Massey University, New Zealand, N. V. Lange to the Institute of Parks Administration, England, and A. G. Alphonso to the Royal Botanic Gardens, Kew. On their return they were appointed Curators, and were subsequently to head their respective departments. It was during the period of training under Holttum that the authors had come to appreciate him as a truly outstanding horticulturist. His immense knowledge of local plants and his long standing experience in practical gardening, won him the admiration of all who came to know and learn under him. Above all, he was a very kind person, and was always willing to help his fellow-men. We are proud and honoured to have served under Holttum.

Holttum's contribution in the field of horticulture has won him many honours and he has been the recipient of a number of awards from horticultural societies in the U.S.A., Great Britain and Singapore. In recognition of his work on orchids in Malaysia and Singapore, Holttum, at the 4th World Orchid Conference held in Singapore in 1963, was awarded the Gold Medal of the Malayan Orchid Society. In addition, the Orchid Society of S.E. Asia awards annually a Gold Medal known as the Eric Holttum Gold Medal to the originator of the best locally produced hybrid. On the occasion of his 80th birthday the Orchid Society of S. E. Asia, at a ceremony at the Royal Botanic Gardens, Kew, presented him with a Gold Medal suitably inscribed, and through the generosity of the Singapore Gardening Society, the Botany Department of the University of Singapore presents annually a Holttum Silver Medal to an honours student who has performed well in his examinations.

Perhaps Holttum's biggest contribution to horticulture in the Malaysia-Singapore region lies in his published works. He is a prolific writer, and his many articles on gardening in the Malayan Agri-Horticultural Association magazine for well over 20 years, are not only instructive but of great benefit to both the amateur and professional gardener. The Malayan Orchid Review, the official organ of the Malayan Orchid Society was first published in 1931. Holttum was the main contributor. He was the expert, and his many and varied topics in the Orchid Review have helped orchid growing in this region. By far, his best works in horticulture and by which the Malaysian and Singaporean will best remember him, are his "Gardening in the Lowlands of Malaya" and his "Flora of Malaya, Vol I — Orchids", mentioned earlier. The former is an excellent book on practical gardening in this region. It is as popular to-day as when it was first published in 1953. The latter, the most outstanding publication on orchids of this area, has been a constant companion of the orchid growers. Holttum is also the author of many other publications on local plants of horticultural interest. His "Flora of Malaya, Vol II — Ferns" and articles on Bamboos, Gingers, Maranta, Grasses and others, published in the Gardens' Bulletin, although taxonomic or botanical in nature, have in many ways helped the horticulturist in his work, especially in the identification of plants he deals with.

We in this region owe a debt of gratitude to Holttum for his outstanding contribution to horticulture. To-day, in both Malaysia and Singapore, there is a thriving orchid industry. The value of present exports of cut orchid blooms from both these countries has reached nearly ten million local dollars. Orchid nurseries have come up in large numbers, and there is no doubt that the orchid industry will continue to expand. This situation would not have come about had it not been for the pioneer work of Holttum in orchid growing. His introduction of asymbiotic flask culture of orchids in 1928, the breeding and hybridisation of orchids which he started, and the encouragement he gave to professionals and amateurs in the field of horticulture have borne fruit.

The role he played as adviser to the Parks Department and in the planting of roadside trees in the early years, his able administration of the two Botanic Gardens of Singapore and Penang, and the valuable knowledge he has imparted to the students as Professor of Botany at the University of Malaya, bear testimony to his foresight and vast horticultural knowledge. And above all, his many horticultural publications will be constant reminders to us all of his dedicated service in this region.

This number of the *Gardens' Bulletin* is specially brought out to commemorate the 80th birthday of Professor Holttum, and in writing this article the authors join the many Malaysians and Singaporeans, the orchid growers, the amateur and professional gardeners, and the members of the Orchid Society of S. E. Asia and the Singapore Gardening Society, in wishing him good health and happiness in the years ahead.